



Name _____

Date _____

KIDS SCIENCE NEWS NETWORK

PURPOSE

To separate the colors hidden within a leaf

MATERIALS

coffee filter
green leaf
quarter
rubbing alcohol (use only under adult supervision)
jar or beaker
tape (optional)

Oh Colors, Where Art Thou? Chromatography

PROCEDURE

1. Lay the coffee filter flat and place the green leaf on top about 1-2 inches from the bottom of the filter.
2. Roll a quarter back and forth several times over the leaf to make a line of pigment on the filter paper.
3. Have an adult pour a small amount of rubbing alcohol into a jar or beaker until the liquid level is approximately a half-inch deep.
4. Place the bottom edge of the filter into the liquid so that the filter is just barely touching the liquid and hold it steady. Optional: Tape the filter to the side of the jar.
5. Allow the liquid to be absorbed by the filter. You will notice that the liquid creeps upward toward the line of pigment that you made on the filter. Once it reaches the line, continue to wait and observe what happens as more and more of the alcohol reaches the line of pigment.

CONCLUSION

1. What colors did you observe?
2. Where were the colors in the leaf before you rubbed it onto the paper?

EXTENSIONS

1. With adult supervision and help, place a few leaves in a pot of water and bring the water to a boil. Continue to boil for approximately three minutes and remove from heat.
2. Observe the color of the water.
3. With adult supervision and help, grind a few leaves with some water in a blender and drain off the water. Observe the color of the water.